

Letter Health Consultation

Evaluation of Physical Hazards at the Tarheel Army Missile Plant (TAMP) Site

TARHEEL ARMY MISSILE PLANT (TAMP) SITE

ALAMANCE COUNTY, NORTH CAROLINA

CERCLIS ID: NC7210020544

Prepared by:

North Carolina Department of Health and Human Services

March 15, 2017

**Prepared under Cooperative Agreement with the
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Agency for Toxic Substances and Disease Registry
Division of Community Health Investigations
Atlanta, Georgia 30333**

Health Consultation: A Note of Explanation

An ATSDR health consultation is a verbal or written response from ATSDR to a specific request for information about health risks related to a specific site, a chemical release, or the presence of hazardous material. In order to prevent or mitigate exposures, a consultation may lead to specific actions, such as restricting use of or replacing water supplies; intensifying environmental sampling; restricting site access; or removing the contaminated material.

In addition, consultations may recommend additional public health actions, such as conducting health surveillance activities to evaluate exposure or trends in adverse health outcomes; conducting biological indicators of exposure studies to assess exposure; and providing health education for health care providers and community members. This concludes the health consultation process for this site, unless additional information is obtained by ATSDR which, in the Agency's opinion, indicates a need to revise or append the conclusions previously issued.

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LETTER HEALTH CONSULTATION

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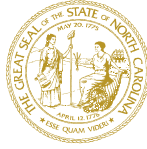
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North Carolina Department of Health and Human Services
Division of Public Health

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March 15, 2017

David Lown
Federal Remediation Branch Head
N.C. Department of Environmental Quality
217 West Jones Street
Raleigh, NC 27603

Saucier Investments LLC (property owner)
5415 Chand Creek Road
Tallassee, AL 36078

RE: Tarheel Army Missile Plant (TAMP) Site Physical Hazards

Dear Mr. Lown and TAMP property owner:

The North Carolina Department of Environmental Quality (N.C. DEQ) contacted the North Carolina Division of Public Health's (DPH) Health Assessment, Consultation and Education (HACE) program in October 2016 regarding the Tarheel Army Missile Plant (TAMP) site. N.C. DEQ staff believe there may be a potential for vapor intrusion at homes near the site and requested DPH's assistance in evaluating the risk to public health from vapor intrusion. DPH staff visited the site that month with staff from N.C. DEQ, U.S. Army Environmental Command, U.S. Army Corps of Engineers and ARCADIS, the environmental remediation contractor. While visiting the site, DPH staff noticed caved in roofs, broken glass and other sharp objects and additional physical hazards to people who may access the site. DPH staff also noticed signs of recreational users and trespassers frequently using the site.

DPH concludes that trespassers and site workers could be at risk for physical harm due to the deteriorating buildings and improperly maintained site areas. Additionally, because there is evidence of frequent access to this site, the physical hazards at the site are an urgent public health hazard.

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DPH recommends the:

- property owner immediately restrict access to the site to only those who are involved in the site investigation or remedial activities. This includes repairing any breaches in the fence surrounding the site and monitoring the fence to ensure trespassers cannot gain access to the site.
- property owner immediately restricts remedial workers' access to the buildings on-site until roofs and other potentially falling materials are stabilized or removed. Due to the age of the buildings on site, the presence of asbestos in building materials should be evaluated prior to any demolition or remodel work.
- property owner immediately post signs alerting remedial workers to physical hazards on site and appropriate personal protective equipment (PPE) needed on site. Signs should be maintained until physical hazards are removed.
- remedial workers at the site wear appropriate PPE to protect themselves from physical hazards on site.

DPH will provide outreach and education to residents living near the site and workers on-site regarding potential physical health hazards associated with accessing the site. DPH will also review available groundwater data on-site and near neighboring homes to address the potential for vapor intrusion at homes. DPH will continue to evaluate environmental data collected for this site and exposures that may impact public health.

The remainder of this letter provides more detailed information on the physical hazards at the TAMP site.

Background

The TAMP site (CERCLIS ID: NC7210020544) is located at 204 North Graham Hopedale Road in Burlington, Alamance County, North Carolina. The property has 22 buildings on approximately 32 acres. The property is bordered on the east side by North Graham Hopedale Road. Businesses are located immediately across the road to the east and back up to the property on the south and west sides. Residential properties back up to the property on the north side. The U.S. Army formerly owned the site, which was used for aircraft production and tank rebuilding. Saucier Inc. acquired the property in 2013 and there are currently no activities on-site. Former operations and leaking underground storage tanks on site have contaminated soil and groundwater, particularly under the Waste Accumulation Pad located toward the center of the site, with petroleum hydrocarbons and chlorinated volatile organic compounds (VOCs) [Johnson 2003].

Many investigations and remedial activities have been ongoing since 1993. These have included soil, groundwater and surface water sampling. Additionally, the underground storage tanks have been removed. These activities have also included the operation of an air sparge/soil vapor extraction system from 1996 to 2004 and the operation of a groundwater pump and treat system from 1999 to 2013. Also, the U.S. Army conducted an in-situ bioremediation pilot test from 2005 to 2007 to attempt to treat VOCs in the groundwater [Weston 2013]. Activities have slowed in the last few years due to a change in property owner and a loss of electricity on-site.

Discussion

Physical Hazards

As shown in the photos provided in Attachment B, many physical hazards exist on the site for trespassers and workers, and evidence shows that the site is frequently accessed. The roofs in Buildings No. 1, 2, 3 and 4 are caving in and collapsing under the weight of large air conditioning units on top of the buildings. Additionally, ceiling tiles in these buildings are degrading and electric fixtures have begun to fall from the ceiling. Portions of the interior wall of Building No. 4 are beginning to collapse. Building 16 contains large sharp metal poles hanging from the ceiling, which could pose a threat given the deteriorating ceilings and roofs. Due to the age of the buildings on site, the presence of asbestos in building materials should be evaluated prior to any demolition or remodel work.

In addition to the physical hazards posed by collapsing buildings, sharp debris scattered throughout central site areas and walking paths is a health hazard due to the potential of being cut or punctured while walking around the site. Broken glass, broken wood, loose bricks, large empty barrels, other debris and unmarked wellheads pose a tripping hazard, which could lead to serious injury to trespassers or workers. Finally, the site currently has no electricity and most buildings lack natural light, making it difficult to navigate the property safely.

While visiting the site, DPH staff noticed a large hole in the fence located in the northwest corner of the property near Building No. 22 and neighboring residents, indicating that trespassers are gaining access to the site. Additionally, the property has a known history of being trespassed on. While DPH staff were on site, they were not required to wear any PPE or take any precautions while moving about the site. All buildings were able to be accessed and no areas of the site were blocked off due to potential hazards. Finally, a recreational event was held on site in October 2015, with people accessing many of the buildings on site for the event, even in their unsafe condition.

In conclusion, DPH reiterates that the physical hazards on site pose an urgent public health risk for workers and trespassers and should be addressed immediately. DPH will continue to work with the property owner and potentially responsible party to evaluate site conditions and environmental data and make recommendations to protect public health as necessary.

Please do not hesitate to contact me at (919) 707-5900 if you have any questions regarding this letter.

Sincerely,

Jamie Pritchett, MTox
Health Assessor, Health Assessment, Consultation & Education Program
Occupational and Environmental Epidemiology Branch, Division of Public Health
N.C. Department of Health and Human Services

cc: John Beasley
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REFERENCES

[Johnson 2003] *Tarheel Army Missile Plant Remedial Action Plan – Final Report*. C.C. Johnson & Malhotra, P.C. May 21, 2003.

[Solutions 2003] *Tarheel Army Missile Plant Remediation Long Term Monitoring Plan – NCDENR Draft*. Solutions Industrial & Environmental Services, Inc. December 31, 2003.

[Weston 2013] *RE: Tarheel Army Missile Plant (TAMP) Facility, Burlington, North Carolina, NC7210020544*. Weston Solutions, Inc. August 6, 2013.

REPORT PREPARATION

The North Carolina Department of Health and Human Services prepared this letter health consultation for the Tarheel Army Missile Plant (TAMP) site under a cooperative agreement with the federal Agency for Toxic Substances and Disease Registry (ATSDR). We wrote it in accordance with the approved agency methods, policies, and procedures existing at the date of publication.

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Attachment A

Maps of the Tarheel Army Missile Plant Site

Tarheel Army Missile Plant (TAMP) Site
Burlington, Alamance County, North Carolina



Figure 1. Map of the Tarheel Army Missile Plant site. Property line is marked in red. Homes are located immediately north and northwest of property line.

Tarheel Army Missile Plant (TAMP) Site
 Burlington, Alamance County, North Carolina

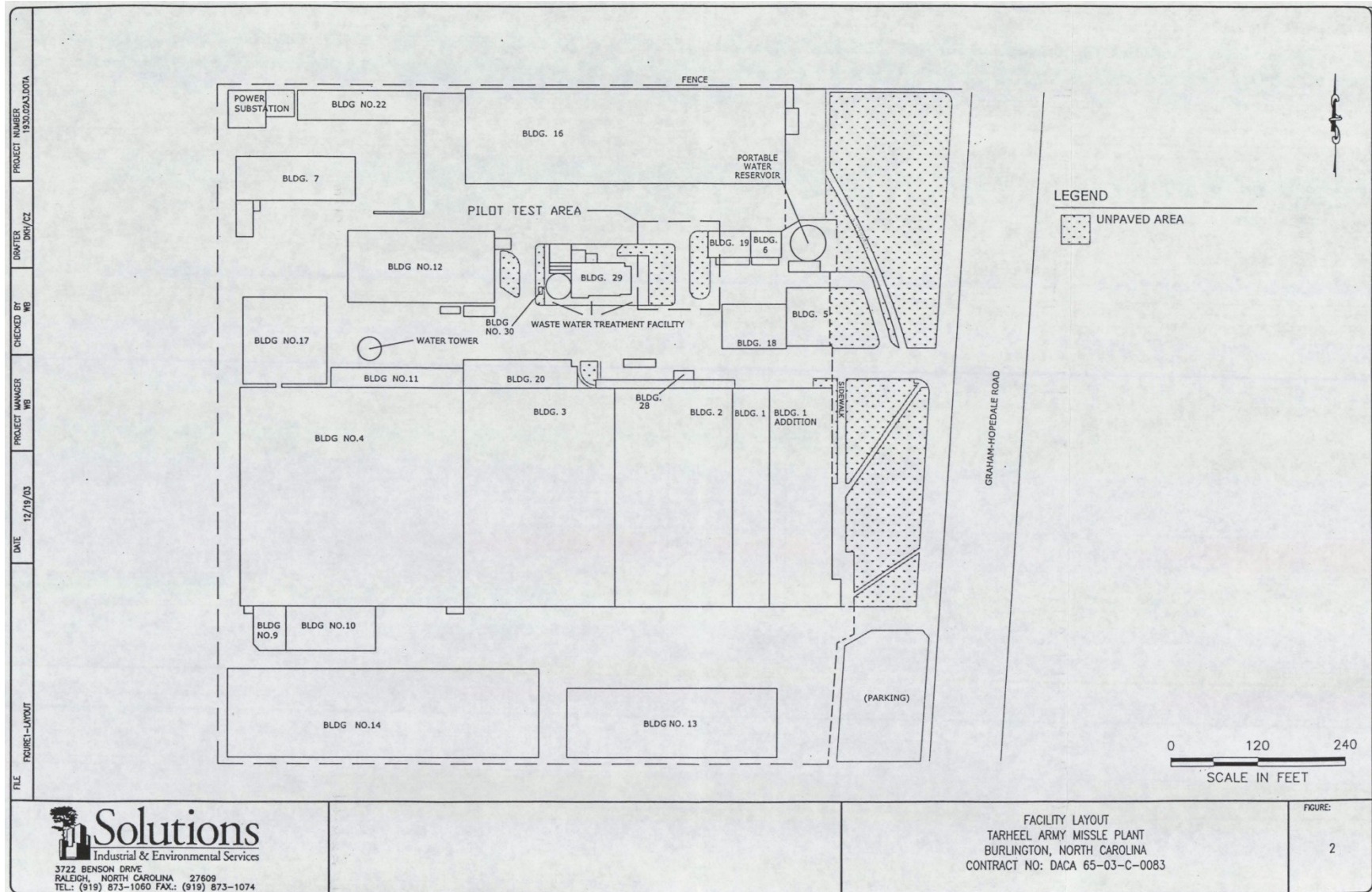


Figure 2. Layout of buildings on the Tarheel Army Missile Plant (TAMP) Site [Solutions 2003].

Attachment B

Site Photos

Tarheel Army Missile Plant (TAMP) Site
Burlington, Alamance County, North Carolina



Photos 1 & 2. Evidence of deteriorating ceiling and falling debris in Building No. 2. Source: DPH, October 25, 2016.



Photo 3 (left). Collapsing roof in Building No. 2. Source: DPH, October 25, 2016.

Photo 4 (right). Sharp metal poles hanging from ceiling in Building No. 16. Source: DPH, October 25, 2016.

Tarheel Army Missile Plant (TAMP) Site
Burlington, Alamance County, North Carolina



Photo 5 (left). Collapsing interior wall on Building No. 4. Source: DPH, October 25, 2016.

Photo 6 (right). Debris strewn on floor in Building No. 2. Source: DPH, October 25, 2016.



Photo 7 (left). Hole in fence surrounding property in northwest corner near residences. Source: DPH, October 25, 2016.

Photo 8 (right). Materials remaining from recreational event held on-site in October 2015. Source: DPH, October 25, 2016.